

## CLAIMS

1. An access router apparatus to control a subnet,  
said apparatus comprising:

5 address information storing means for storing  
address information usable in at least one adjacent  
subnet arranged adjacent to said subnet controlled by the  
apparatus itself;

address selecting means for selecting said address  
10 information stored in said address information storing  
means; and

address providing means for providing said address  
information selected by said address selecting means to a  
mobile terminal connected to said subnet controlled by  
15 the apparatus itself.

2. The access router apparatus according to claim 1,  
wherein there is provided address information updating  
means for acquiring said address information from the  
20 access router to control said adjacent subnet and for  
storing said acquired address information to said address  
information storing means.

3. The access router apparatus according to claim 1 or  
25 2, wherein said address selecting means is designed to

select said address information to be provided to said mobile terminal in response to a request from said mobile terminal.

5     4.     The access router apparatus according to claim 3,  
wherein said address selecting means selects said address  
information usable in said adjacent subnet at handover  
destination of said mobile terminal according to  
identification information related to said adjacent  
10    subnet received from said mobile terminal.

5.     The access router apparatus according to claim 1 or  
2, wherein, in case said address information is provided  
by said address providing means to said mobile terminal,  
15    said address information provided by said address  
providing means is deleted from said address information  
stored in said address information storing means.

6.     The access router apparatus according to claim 1 or  
20    2, wherein said apparatus is provided with a function  
relating to fast handover, and said address providing  
means is designed to transmit FBack message or PrRtAdv  
message including said address information selected by  
said address selecting means to said mobile terminal.

7. A communication handover system, comprising a plurality of access router apparatuses, each controlling a subnet, said system further comprising:

address information storing means for storing an  
5 address information usable in at least one adjacent  
subnet arranged adjacent to said subnet controlled by the  
apparatus itself, address selecting means for selecting  
said address information stored in said address  
information storing means, and address providing means  
10 for providing said address information selected by said  
address selecting means to a mobile terminal connected to  
said subnet controlled by the apparatus itself; and  
said mobile terminal acquires said address  
information stored in said address information storing  
15 means from said specific access router apparatus under  
the condition that it is connected to said subnet of said  
specific access router prior to the handover to said  
adjacent subnet from said subnet.

20 8. A communication handover method in a communication  
handover system, comprising a plurality of access router  
apparatuses, each controlling a subnet, said method  
comprising the steps of:

acquiring and maintaining an address information  
25 usable in at least one adjacent subnet arranged adjacent

to said subnet controlled by the apparatus itself by one  
access router apparatus among said plurality of access  
router apparatuses; and

providing said address information maintained by  
5 said access router apparatus where said mobile terminal  
is connected when a mobile terminal connected to one  
access router apparatus among said plurality of access  
router apparatuses carries out handover to said adjacent  
subnet from said subnet controlled by one access router  
10 apparatus among said plurality of access router  
apparatuses.